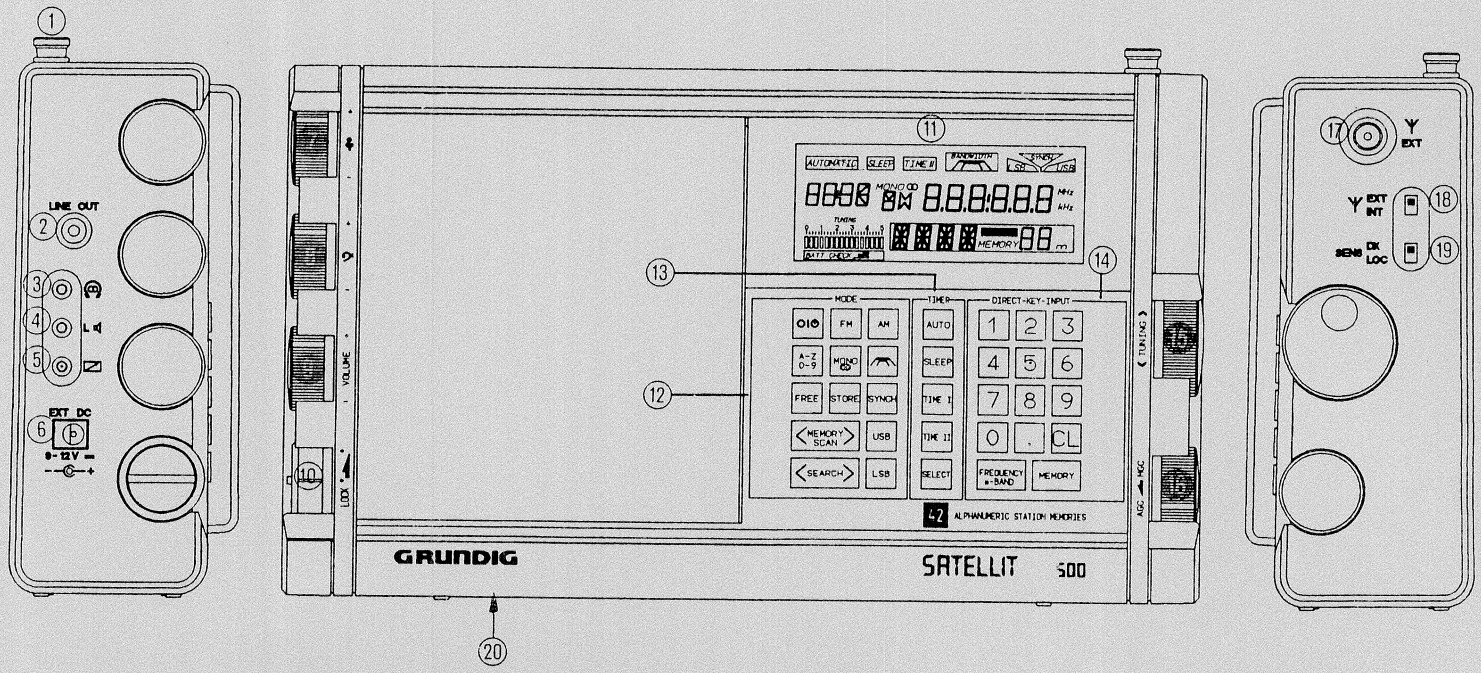
# WR WORLD RECEIVER

PROFESSIONAL
INTERNATIONAL

GRUNDIG


1
LINE OUT
2
3
4
5
EXT DC
6
9-12V
11
AUTOMATIC
SLEEP
TIME II
MONO
MEMORY
13
14
12
MODE
FM
AM
FREE
STORE
SYNCH
MEMORY SCAN
USB
SEARCH
LSB
TIMER
AUTO
SLEEP
TIME I
TIME II
SELECT
DIRECT-KEY-INPUT
1 2 3
4 5 6
7 8 9
0 . CL
FREQUENCY ▸BAND
MEMORY
42 ALPHANUMERIC STATION MEMORIES
10
LOCK
VOLUME
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15
16
AUG
MOD
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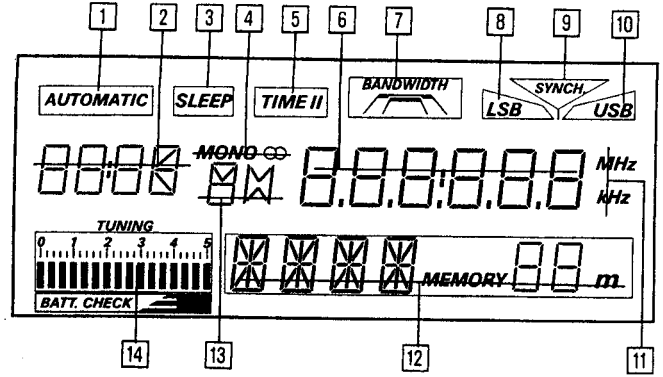
SATELLIT 500
20
17
EXT
EXT INT
18
SENS
DX LOC
19

# Satellit 500 – Multifunction Display




1 **AUTOMATIC**
Switching time(s) programmed.

2 **Time Display**
- Indication of the time of day and the switch-on times.
- Indication of the LOCK function.

3 **SLEEP**
For programming a sleep time.

4 **MONO/∞(Stereo)-Indication**

5 **TIME I/TIME II**
Indicates which time (time of day, switch-on time 1 or 2, respectively) is shown in the time display 2.

6 **Main Display**
- Indication of the time of day, the switching times, and the frequency.
- Error = operating error

7 **BANDWIDTH**
Bandwidth indication on AM (LW, MW, SW).
⌒ = narrow ⌒ = wide.

8 **LSB (Lower Side Band)**
Lower side band on single side band reception **(SSB)**.

9 **SYNCH.**
100 Hz tuning raster on AM selected.

10 **USB (Upper Side Band)**
Upper side band on SSB reception.

11 **Frequency Indication**
In MHz on FM (VHF), in kHz on AM (LW, MW, SW).

12 **Indication of:**
- Memory positions MEMORY 1 – 42
- SW-m-band
- Programmed station abbreviations (alphanumeric)
- AS (Auto-search) = automatic station search
- HA = manual station tuning by direct entering the frequency and station search.
- FREE = free station position.
- FULL = all station positions occupied (full station memory).
- STAT (Station) and memory position number = station already stored (AUTOCOMPARE = automatic compare).
- NEW = station not yet stored.
- ON 1/2–SEL 1/2–OFF 1/2 = ready for entry of the switching times.

13 **Waveband**
LW (Longwave), MW (Mediumwave), SW (Shortwave), FM (VHF).

14 **Field Strength and Battery Condition**

# Your Satellite at a Glance

① **Telescopic Aerial**
For FM and SW reception.
Can be extended and positioned for best reception.

② **Cinch-Socket** (LINE OUT)
High-level output for connecting an amplifier or for tape recordings.

③ **Headphone Socket** (🎧)
Switch socket for stereo operation.
For stereo headphones with 3.5 mm jack plug and 32-2000Ω.
When connecting a headphone, the built-in loudspeaker is automatically disconnected.

④ **Loudspeaker Socket** (L 🔊)
Switch socket for stereo operation.
For external loudspeaker with 3.5 mm jack plug and 8 Ω impedance.
On FM (VHF) reception, the left-hand channel will be reproduced (built-in loudspeaker = right-hand channel).

⑤ **Switch Socket Output** (⊘)
For controlling external units (eg: a tape recorder).

⑥ **Coaxial Socket 5.5 mm 9 – 12 V ⎓** (EXT. DC)
For connecting the mains unit NR 90 supplied with the set or for connecting to a 12 V external (board) supply system. −−◎−+

⑦ **Treble Control** (𝄞)

⑧ **Bass Control** (𝄢)

⑨ **Volume Control**

⑩ **Locking Switch** (LOCK ▬ )
In position LOCK (indication in the display ⑪ [2]) and with the set switched on, all buttons on the front panel (On/Off switch excluded) and the ❮TUNING❯ knob ⑮ are "locked", thus avoiding accidental detuning.
When the set is switched off and switch ⑩ is in its LOCK position, switching on is not possible.

⑪ **Display**

⑫ **MODE Buttons** (Operating Modes)
O/⏻
for switching on and off.
FM (Frequency Modulation)
for switching over to the FM (VHF) band (indication [13]).
The station received last on this band will be heard (Last Station Memory).
AM (Amplitude Modulation)
for switching over to AM.
Further repeated pressing of this button selects the AM bands in the following sequence: LW–MW–SW–LW–MW, etc.
(Indication [13] in the display).
The station received last in the concerned band will be heard (Last Station Memory).
A–Z/0–9
Press for entering the station name. Select the required letters and figures with tuning knob ❮TUNING❯ ⑮ (indication [12] in the display).

MONO ∞(Stereo)
(Indication [4] in the display).
For switching over to mono reception, eg: if stereo broadcasts are subject to interference.
The stereo symbol ∞ appears only if a headphone or external loudspeaker is connected.

(inidication [7])
For changing the bandwidth in the AM bands.

FREE
Displays the free memory locations in increasing sequence. Erases occupied memory locations which have been preselected with the buttons 0–9.
If all memory locations should be occupied, the display will show FULL.

STORE
For storing the stations in the memory (up to 42 frequencies, operating modes, and names).

SYNCH (synchronous)
For switching over to the 100 Hz tuning raster on AM (indication [9]).

❮MEMORY SCAN❯
- To retrieve occupied memory locations in the direction of decreasing (❮) and increasing (❯) location numbers, respectively.
- Memory locations which are not occupied are skipped.

USB
Upper side band on single side band reception (indication [10]).

❮SEARCH❯
- For starting the automatic station search on FM (VHF).
- For starting the automatic raster tuning on AM.
- For manual tuning on MW and LW in the 9 kHz raster. On MW, the switch in the battery compartment permits to switch over to the 10 kHz raster (USA raster).
- For manual tuning on SW in the 5 kHz raster.
- On SW reception for selecting the lower cut-off frequency of the preceding or following meter band. Tuning has then to be performed with the tuning knob ❮TUNING❯ ⑮.

LSB
Lower side band on single side band reception (indication [8]).

⑬ **TIMER Buttons** (Clock functions)

AUTO (Automatic, indication [1])
For activating the switch-on and switch-off times 1 and 2.

SLEEP (Sleep time, indication [2])
For entering a sleep time of up to 60 minutes in steps of 10 minutes.

TIME I/TIME II (time indication [5])
For starting the clock and recalling the times I and II.

SELECT (Switch-on and switch-off times)
Preselection button.

⑭ **DIRECT-KEY-INPUT Buttons**

0–9 and .

Numbered keys for all numerical entries.
Button CL for clearing wrong entries.

FREQUENCY/m-Band

- For transferring the frequencies entered with the buttons 0–9 and . into memory.
- For transferring the SW-m-band entered with the buttons 0–9 into memory.

MEMORY

For recalling preset stations (preset with buttons 0–9).

⑮ **Tuning Knob** (❮TUNING❯)

Tuning steps:

- On FM (VHF): 25 kHz
- On MW, SW and LW: 1 kHz
- On SSB- and synchronous operation: 100 Hz

⑯ **Switch AGC ▬ MGC** (on AM)

**AGC** = **A**utomatic **G**ain **C**ontrol. Click-stop position for "normal" radio reception.
**MGC** = **M**anual **G**ain **C**ontrol.

⑰ **Coaxial Socket** DIN 45325/75 ohm (Y EXT)

Aerial connection for all wavebands.

⑱ **Aerial Switch** (Y EXT/INT)

INT = Telescopic aerial ① effective.
On SW reception, an aerial amplifier is switched to the aerial circuit.
EXT = External aerial connected to socket ⑰ switched to the aerial circuit.

⑲ **Distant-Local-Switch** (SENS DX/LOC)

Permits to optimize the reception quality when receiving with the telescopic aerial or an external aerial on SW reception.

DX = distant reception = normal position
LOC = local = local (short-range) reception.

Due to the much more better SW propagation conditions during the evening and night hours, there may be interferences caused by a too strong aerial signal during these hours.

If this should be the case, switch the receiver to **LOC**.

In doing so, weak stations which otherwise would be "covered" by the interference noise, can also be intelligibly received.

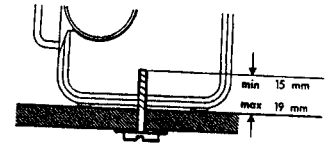
⑳ **Battery Compartment** (in the back of the set)

- In the battery compartment, at the upper **left**, there is a slider switch for switching over from 9 kHz to 10 kHz tuning steps on MW reception.
- In the battery compartment, at the upper **right**, there is a slider switch ACC/BATT. (see indications in the battery compartment).

On the top of the unit and on the identification plate you will find indications about the SW bands which can be received (AB = amateur bands).

**Securing the Unit**

The Satellit can be secured for mobile operation. For this, two threaded holes M4 are provided in the base. Use screws which are **at least** 15 mm and **maximal** 19 mm longer than the thickness of the material to which the Satellit is to be secured. (See Fig.).



## Power Supply

**Battery or Accumulator Operation,** with 4 "HP 2" batteries IEC LR20 (alkaline-manganese batteries) or an NiCd accumulator of same size (commercially available).

- Open the battery compartment ⑳ (on the back of the set).
- Insert the batteries as shown in the drawing.

**Attention!**

- **The slider switch ACCU/BATT. (in the battery compartment) must be placed into position BATT.**
  **When batteries are inserted, never set the switch to ACCU or leave it in this position.**
  **No responsibility can be accepted for damage due to wrong operation of the charging unit.**
- When using an NiCd accumulator, the switch must be set to **ACCU**.

**Charging Time:**

On operation with the AC adapter NR90 and with the set switched off, the charging time will be 1 to 2 days, depending on the charging state of the accumulator.
Even if the AC adapter NR90 remains permanently connected to the accumulator, this cannot be overcharged, as the adapter is automatically switched to "Trickle Charge" as soon as the nominal voltage is reached.

**Note**

If the set cannot be switched on, or if only the clock indication is flashing after switching on, the supply voltage is too low. If this should be the case, replace the complete set of batteries or recharge the accumulator.

- Always remove exhausted batteries immediately.
- If the set is not in use for longer periods, remove batteries even if they are new.

– No responsibility can be accepted for damage due to leaking batteries.

**Data Protection**

When the set is switched off, a built-in standby battery (rechargable lithium battery) protects the data stored in the 42 memory locations of the unit. This applies also if no external voltage supply is connected or if no batteries are inserted.
In this case, however, it will be necessary to programme the clock anew.

**Note on Environmental Protection**

Do not throw exhausted batteries in the household refuse. Hand over the old batteries to your dealer or public collecting points when buying a new one.

**Checking the Condition of the Batteries or of the Accumulator** (BATT. CHECK)

After switching on the set, the indication "BATT. CHECK" will appear for approx. 10 seconds down on the left in the display. The bar indication above it shows the condition of the batteries or of the accumulator.
If the bar exceeds the black field, the batteries are in good condition or the accumulator is sufficiently charged. If the bar does not reach the black field, the batteries must be replaced or the accumulator recharged.

**Mains and Charging Operation**

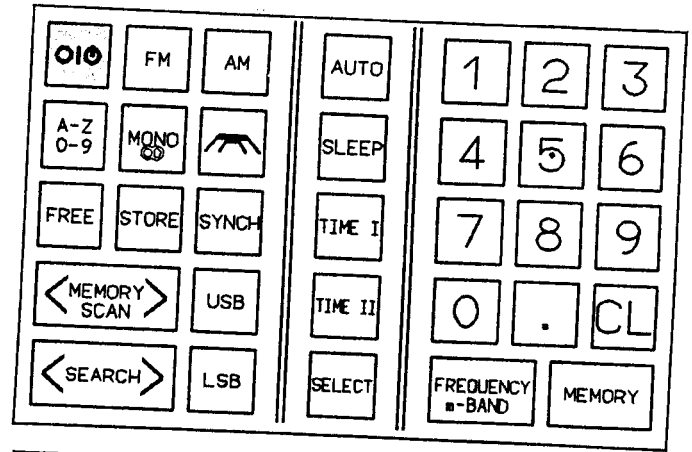
With the mains unit/AC adapter NR90 which comes with the set.

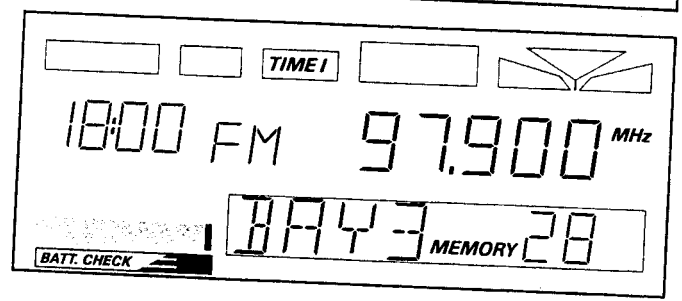
- Adjust the local mains voltage on the mains unit.
- Connect mains unit to socket EXT. DC ⑥.
  Inserted batteries are automatically disconnected, as soon the set is operated from mains unit.
- If the set is to be operated permanently from the mains, remove batteries.

**Operation from an External DC Source**

Connect the external DC source (9-12V DC from the power supply system of a boat, car or camper) with a commercially available cable (with inner positive pole) to socket EXT. DC ⑥.

- If the set is to be operated for a long period from the external DC source, remove the inserted batteries.



## *Aerials*

*for all wavebands*

**Built-in Aerials for Mobile Operation**

- The aerial switch ⑱ must be set to **INT.**

Telescopic aerial ① for FM (VHF) and SW reception:

- When the aerial base is **completely** pulled out, the telescopic aerial can be tilted and rotated into several lokking positions.
- For optimum FM reception, do not completely pull out the aerial (leave 3 elements pushed in) and swivel it into the best reception position.
- For SW reception, fully extend the telescopic aerial and place it vertically.

Ferrite rod aerial for MW and LW reception:

- Turn the set about its vertical axis to find the best position for receiving a station.

**Aerial Connection for Stationary Operation with an External Aerial**

for all wavebands.

- In this case, the aerial switch ⑱ must be set to **EXT.**

When reception conditions are poor, connect an external aerial (eg: a common aerial) to socket EXT. Y.
On SW reception, the switch SENS DX/LOC ⑲ permits to obtain optimum reception.

## *General Operation of the Set*

For convenient operation, the set is provided with a stand (in the back) which allows to bring it in a tilted position.

**Switching On and Off with Button O/⏻**

To switch on the set, the locking switch LOCK ▬ must be set to "Unlock" (no "LOCK" indication in the display).

Press button for approx. 1 second to switch on.

**Direct Entries**

- Enter all numeric values with the **numbered buttons:** Frequencies, preset stations (programming or recalling), SW-m-bands, time of day, and switching times).
- According to the entry, confirm this with the following buttons: FREQUENCY/m-Band, STORE, MEMORY, FREE and TIME I/TIME II.
  Use button SELECT for selecting step by step the switching times ON 1/2-SEL 1/2-OFF 1/2.

**Display Illumination** (Night Design)

When the unit is connected to an external voltage supply, the display and the right-hand push-button set are permanently illuminated – even if the set is switched off.

On battery operation, the illumination can be switched on for about 10 seconds by pressing one of the buttons of the right-hand push-button set.
When switching on the unit, the illumination will stay on for approx. 10 seconds.

**Adjust Volume and Tone to Suit Your Taste with the Buttons**
⑦ 𝄞 treble, ⑧ 𝄢 bass (optimum frequency response when both controls are set to maximum), and ⑨ VOLUME.

**Waveband Selection**

When switching on the set with button O/⏻, the last station tuned to will be heard.

FM

Select the FM band with button "FM".

AM

The first pressure on this button will tune the receiver to the station received in the AM band used last.
Repeatedly pressing this button selects step by step the wavebands LW–MW–SW–LW–MW, etc., and the station tuned to last in the respective band.

## *Tuning to Stations*

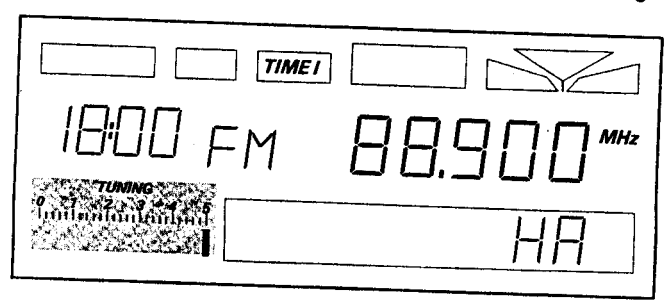
### 1. Manual Tuning.

- Switch on the set with button O/⏻.
- Select the required wavebands as described in chapter "Waveband Selection".
- Tune to the desired station with the notched tuning knob ❮TUNING❯ ⑮.

  Each notch of the tuning knob alters the tuning frequency by 1 kHz in the case of AM reception (LW, MW, SW), by 100 kHz in the case of SSB operation and switch position "SYNCH", and by 25 kHz on FM (VHF) reception.

  The display ⑪ shows the frequency tuned to in kHz on AM reception, in MHz on FM (VHF) reception, and indicates "HA" in the case of manual tuning.

Maximum deflection of the bar indication TUNING in the display (down on the left) signals optimum tuning.



## 2.Tuning with the Numeric Buttons

(Direct frequency entry)

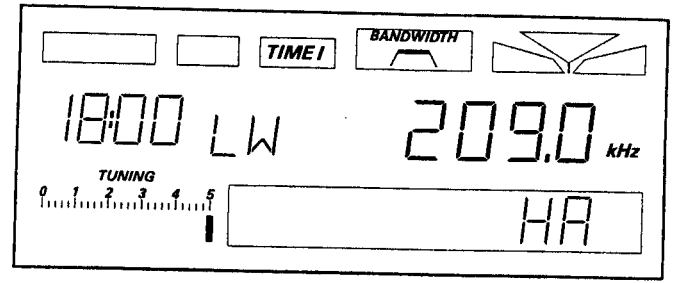
In this case, the frequency of the station to be tuned to must be known.
The frequencies may be found in transmitter tables or local radio programme guides.
The required waveband needs not to be preselected.
In the case of SW reception, it is also possible to enter a meter band.

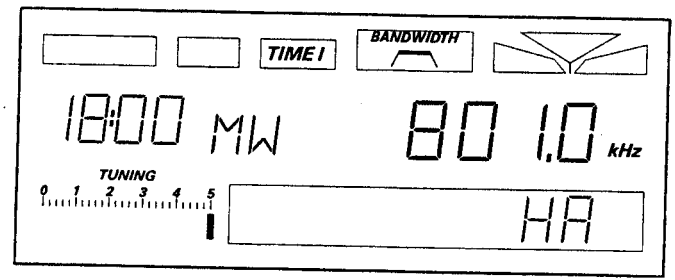
The following programming steps must be carried out **not more than 12 seconds after the preceding one**, otherwise the data already entered are lost and you must start again.

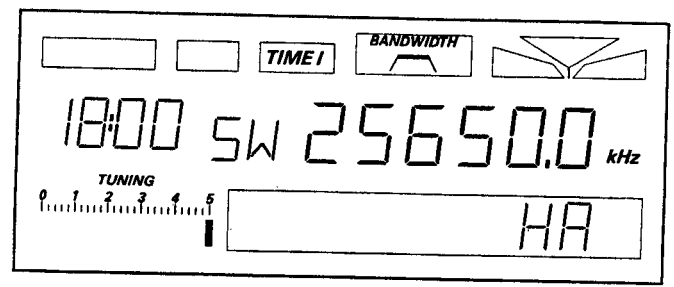
In the case of **wrong entries or operating errors**, the display will show "Error" for about 2 seconds and at the same time a warning sound signal will be heard.
**To immediately clear** any wrong entry which has **not yet been confirmed** with the respective button **TIME, FREQUENCY/m-Band** or **MEMORY**, press **clear button CL**.
**On FM**, the frequencies must be entered in MHz and with a decimal point.
**On AM**, the frequency can be entered either in MHz or in kHz (the indication will be in kHz after the entry).

**Examples:**

| Desired frequency | Entry sequence | |
|---|---|---|
| 100.100 MHz | 100.1 | FREQUENCY/m-Band |
| 99.000 MHz | 99.0 | FREQUENCY/m-Band |
| 99.000 MHz | 99. | FREQUENCY/m-Band |
| 88.200 MHz | 88.2 | FREQUENCY/m-Band |
| 7000 kHz | 7000 | FREQUENCY/m-Band |
| 7000 kHz | 7. | FREQUENCY/m-Band |
| 600 kHz | 600 | FREQUENCY/m-Band |
| 600 kHz | .6 | FREQUENCY/m-Band |




Because of the electronic band selection facility, band selection is performed automatically.

### 3. Entering a m-Band on SW Reception

On SW reception, entered **numbers below 100** with subsequent confirmation by the FREQUENCY/m-Band button will be interpreted as wavelength in meters. When the entry is correct, the set will tune to a station which can be received in this meter band in the case of **radio bands**, and to the beginning of the selected meter band in the case of **amateur bands**. *

It is possible to enter the following meter bands:

10 (Satellite international), 11, 12, 13, 15, 16, 17, 19, 20, 22, 25, 30, 31, 40, 41, 49, 60, 75, 80, 90.

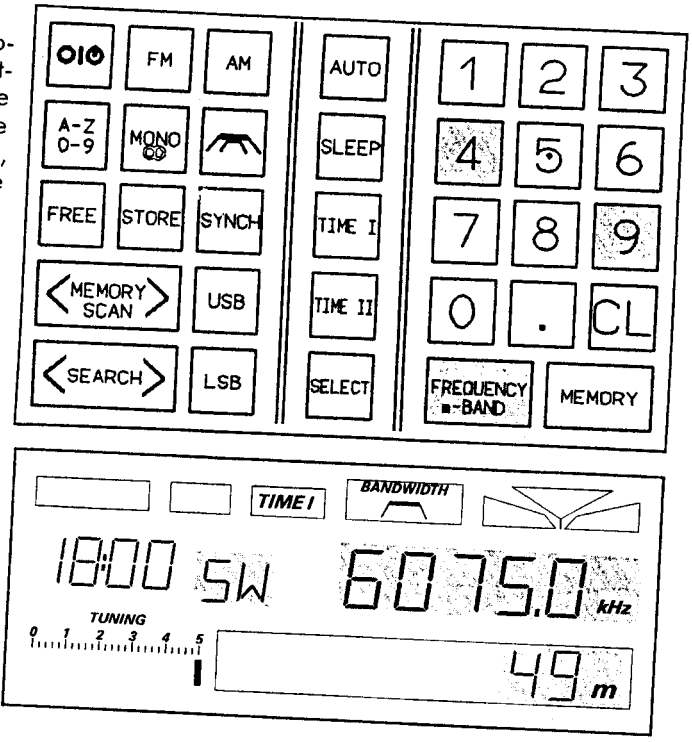
Example for entering the 49-m-Band:

4 9 FREQUENCY/m-Band ⟶ 6075 kHz (= Deutsche Welle).

Indication of the actual meter band on SW

- On direct band entry or in the SW-Band-Scan mode (see later): The selected band is permanently indicated in the display.
- On direct band entry or manual tuning:
  If the frequency tuned to lies in one of the above stated meter bands, it will be permanently indicated in the display, otherwise the display will show "HA".
- After recalling a station memory position:
  The selected station No will appear (MEMORY plus No). If the frequency lies within a valid meter band, this band will be indicated after 10 seconds.
  If the frequency does not lie within one of the above stated meter bands, the station number will be indicated permanently.

When pressing the MEMORY button without having entered the frequency beforhand, the display will show the station No for about 10 seconds and then switch back to m-Band indication.




* See table on page 40.

## 4.Tuning to a Station in the FM Band with the Station Search Button

- Select the FM waveband.
  You will hear the last station tuned to in this wavebands.
- Start the **station search** with button ❮SEARCH❯.
  ❮ = in direction of descending frequencies
  ❯ = in direction of ascending frequencies.

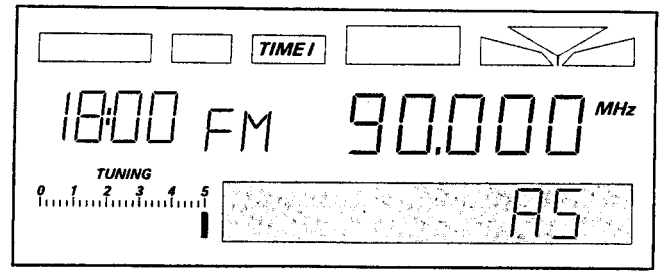
  The station search facility operates in the 50kHz raster (tuning steps of 50kHz).

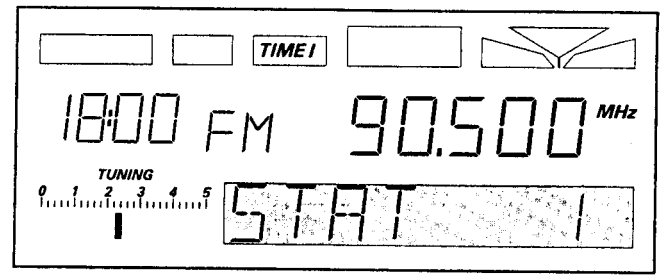
  The display will show "AS" (Auto-Search).

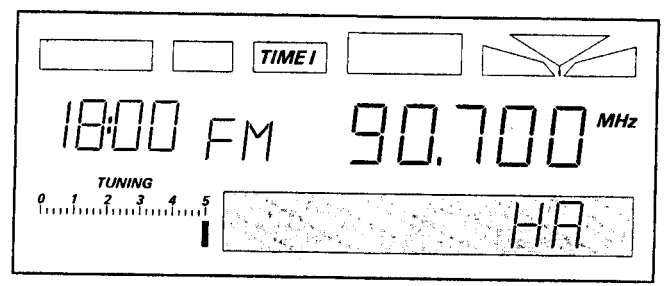
When the automatic station search facility has found a station with a signal strength sufficient for good reception, the search process is stopped.
Pressing the button ❮SEARCH❯ will start the station search again.

**AUTOCOMPARE** (Automatic Compare)

If the station tuned to is already stored in the memory, the display will show the station No (eg: STAT1) and after approx. 10 seconds the eventually stored 4-position station name.
Otherwise "HA" will appear (for manual tuning) and the station is heard.



## 5. Raster Station Search on AM (Frequency Scanning)

MW (9 kHz and 10 kHz, respectively) and LW

By **brievly pressing** the button ❮SEARCH❯, a frequency already tuned to will be increased or decreased by one raster step. If a frequency lying beyond the raster points was selected before pressing the ❮SEARCH❯ button, the receiver will automatically tune to the next raster point in the selected direction.
In this case, the AUTOCOMPARE function will also be applied. An already stored station will be indicated.
**Longer pressure** on the ❮SEARCH❯ button (approx. 1 s) will start the raster search (frequency scanning) in the selected direction.
The search facility will hold for approx. 3 seconds on each raster frequency and switch to radio reception.
Pressing any button or operating the tuning knob ⑮ will interrupt the search mode.

SW

**Shortly pressing** button ❮SEARCH❯ selects the **m-bands**.

❮ = each pressure on the button switches to the lower cut-off frequency (band beginning) of the next higher m-band (lower frequency).

❯ = each pressure on the button switches to the lower cut-off frequency (band beginning) of the next lower m-band (higher frequency).

**Longer pressure** on the button starts a frequency scanning in 5 kHz steps within the selected m-band.
When the band end is reached, scanning starts again at the beginning of the same band.
Pressing any button or operating the tuning knob ⑮ interrupts this operating mode.

| Band (m) | Lower Cut-Off Frequency (kHz) | Radio Station * or Band Centre |
|---|---|---|
| 90-m-tropic | 3200 | 3300 |
| 80-m-amateur | 3500 | |
| 75-m-radio | 3900 | 3955 (BBC) |
| 60-m-tropic | 4750 | 4915 (Nairobi) |
| 49-m-radio | 5950 | 6075 (DW) |
| 40-m-amateur | 7000 | |
| 41-m-radio | 7100 | 7200 (VOA) |
| 31-m-radio | 9500 | 9635 (BBC/Monaco) |
| 30-m-amateur | 10100 | |
| 25-m-radio | 11650 | 11835 (BBC/Vatican) |
| 22-m-radio | 13600 | 13700 |
| 20-m-amateur | 14000 | |
| 19-m-radio | 15100 | 15275 (DW) |
| 16-m-radio | 17550 | 17715 (DW/RAI/BBC) |
| 17-m-amateur | 18068 | |
| 15-m-amateur | 21000 | |
| 13-m-radio | 21450 | 21600 (DW) |
| 12-m-amateur | 24890 | |
| 11-m-radio | 25670 | 25820 (France) |
| 10-m-amateur | 28000 (only on Satellit 500 intern.) | |

* Not all stations are transmitting broadcasts all day and night long and during any season.
For this reason, please observe the different transmitting times.

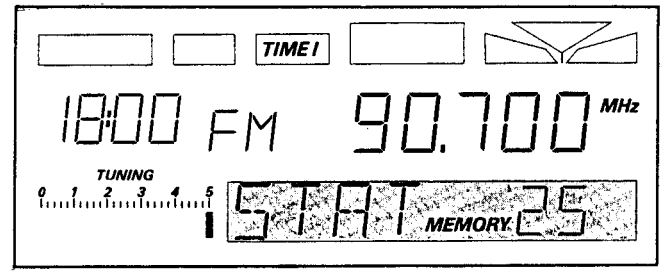
## *Storing of Stations*

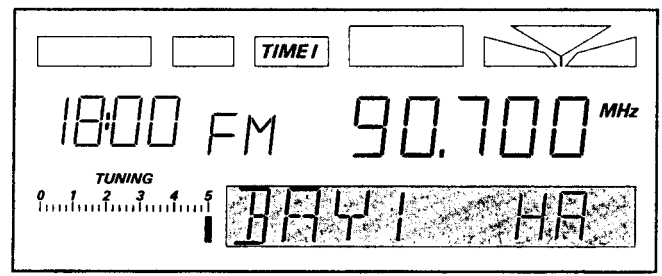
- Up to 42 stations can be stored in random sequence and out of any of the 4 wavebands FM, LW, MW, and SW into the memory.
- Each station you are listening to at the moment can be stored.
- The respective operating modes and the alphanumeric station abbreviations (of max. 4 positions) are automatically stored with the stations.

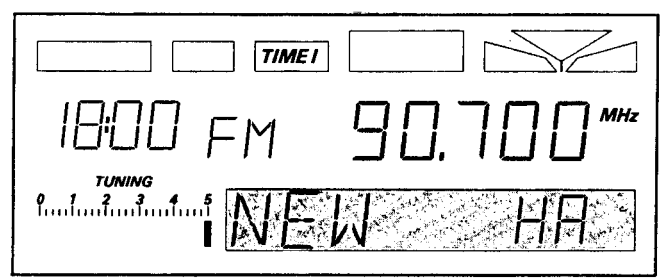
Before storing a station, you can check whether it is already stored in the memory by **briefly pressing** button **STORE**.
If the station is already stored, the station number (memory position) will appear in the display (eg: STAT 25).
**Longer pressing** the STORE button indicates whether the station concerned is stored more often and, if this is the case, on which memory positions (station number).
After that, the display will show the station abbreviation – if programmed – and "HA" for manual tuning.
If the station is not yet stored into the memory, the display will show **NEW**.

To avoid that an already stored station is accidentally erased, it is possible to select the intended memory position before storing the new station:

- Enter the memory position number with the numeric buttons.
- Press button **MEMORY**.
  If the memory position is free, the display will show **FREE**, if not, the display will show the frequency of the already programmed station.



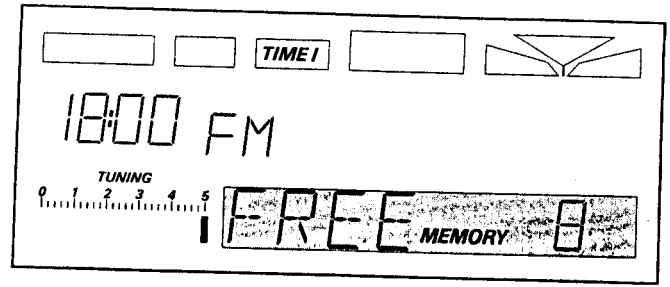



During this function, the station tuned to last remains always temporarily stored on button "0" of the numeric buttons ("Manual Tuning Memory" HA) in the **waveband concerned**.

Thus it will always be possible to recall this station by pressing button **"0"** and button **"MEMORY"** and to search another memory location.

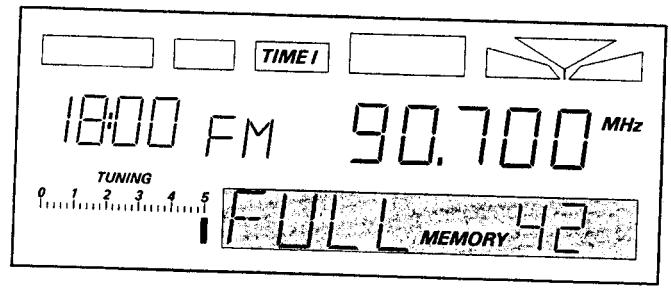
If, for example, a station of another waveband is stored in the memory location selected with the **MEMORY** button, pressing the button combination 0-MEMORY will bring back the station listened to before.
In this case it might be necessary to repeatedly press button **AM** or to switch over to the **FM** band.




**FREE Button**

A further possibility for searching free memory locations offers the button **FREE**. As long as you are pressing this button, the numbers of free memory locations are shown one after the other beside the indication "FREE" in the display.

If all memory locations are already occupied, the display will show **"FULL"**.



**Storing:**

- Enter the number of the memory location with the numeric keys.
- Press button **STORE**.
  The display will show **MEMORY** and the number of the selected memory location. The stored station is still heard.

On SW, the display will show the number of the memory location and, if the station lies within a radio or amateur band, after approx. 10 seconds the meter band.

**Recalling Stored Stations**

- Enter the number of the desired memory location with the numeric buttons.
- Press button **MEMORY**.
  If the selected memory position is not occupied by a station, the display will show "FREE" for approx. 3 seconds.
  The station tuned to before will further be heard.

When recalling stored stations by the numeric buttons, the unit automatically selects the correct wavebands (Intermix function).

**Button MEMORY SCAN**

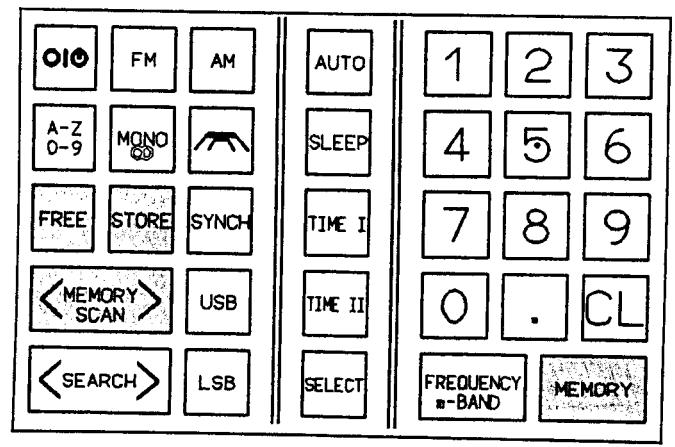
This button permits to recall stored stations one after the other:

< = in direction of descending memory location numbers
> = in direction of ascending memory location numbers.
Memory locations which are not occupied are automatically skipped.

**Longer pressing** the button (approx. 1 s) starts the memory search facility in the desired direction. In this operating mode, each stored station will be played for about 3 seconds. Pressing any button or operating the tuning knob ⑮ will interrupt this function.

**Erasing an Occupied Memory Location**

- Enter the number of the desired memory location (station number) with the numeric buttons.
- Press button **FREE**.
  The display will show **"FREE"**.

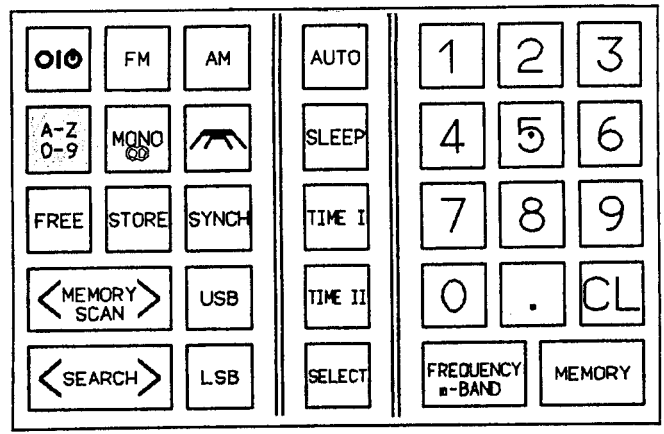


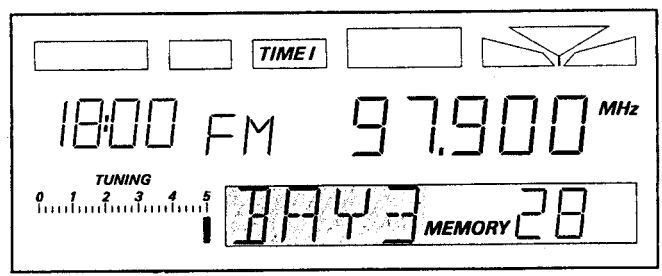
**Entering a Station Name** (Abbreviation)

It is possible to store in each memory location (1 – 42) in addition to the frequency a station name (abbreviation) of up to 4 positions, either when programming the station frequency or at a later date (eg: SWF3, WDR2, DLF, RIAS).

- The entry is initialized with the button **A–Z/0–9**. The station tuned to will further be heard and a cursor will flash on the left in the display.
- By **turning the tuning knob** ⑮ a letter (A–Z) or a figure (0–9) can be selected.
- Each further pressure on button **A–Z/0–9** advances the cursor one position to the right, thus allowing programming of all 4 positions.
- After having programmed the last position, press button A–Z/0–9 anew. The cursor will disappear and the entered abbreviation is allocated to the memory location (station).
- When pressing the A–Z/0–9 button once more, the cursor will appear again on the left side, thus allowing correction of the entry.

**When quitting the input mode (eg: by selecting another function), the actual entry is automatically stored into memory.**



# Special Functions on AM Reception

### Bandwidth

With button ⌒ the bandwidth can be changed in the wavebands LW, MW and SW. The display will show:

⌒ = narrow (~ ± 1.9 kHz)

In this position, it will be possible to separate two closely adjacent stations.

⌒ = wide (~ ± 3.4 kHz)

In this position, the bandwidth is increased to improve the sound quality when receiving stronger stations.

The settings are automatically stored into the memory.

### Synchronous Detector

If the narrow bandwidth setting does not suffice to separate two adjacent stations, there still remains the possibility to optimize the station tuning by means of the synchronous detector.

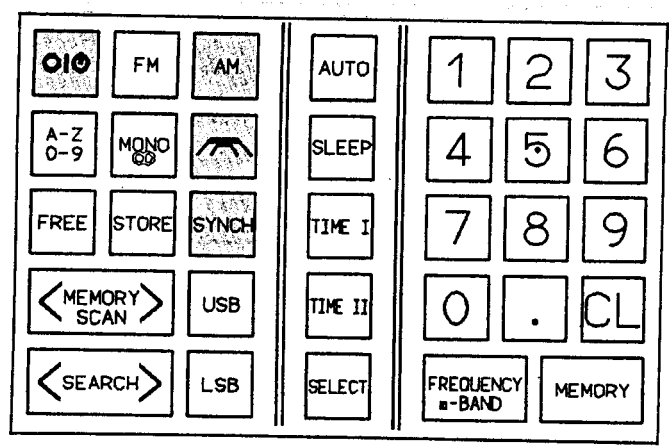
Pressing the button **SYNCH.** permits fine tuning in 100 kHz steps (100 kHz raster) with the tuning knob ◀**TUNING**▶ ⑮. The display will show SYNCH.

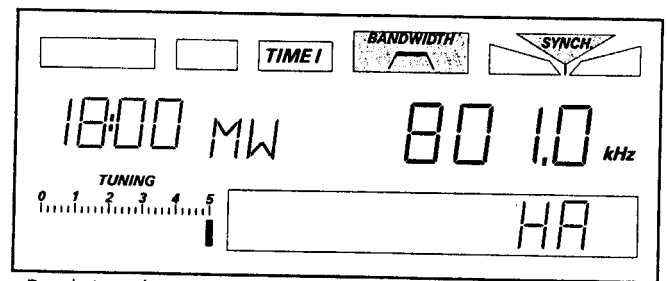
With this function you have the possibility to tune the desired stations "away" from the disturbing station thus distinctly reducing the disturbing effect.

This function is automatically stored into the memory.

### Individual Input Circuit Tuning

Holding pressed down the MONO button and turning the tuning knob ⑮ permits an individual trimming of the input circuit selectivity.




By doing that, the effects of the disturbing station can distinctly be reduced. To return to the initial position (automatic input circuit tuning), turn the tuning knob one step upwards or downwards with the MONO button not being pressed.

## *Going to Sleep to Radio*

The **SLEEP** button permits to programme a playing time ("sleep time") of up to 60 minutes.

- Repeatedly pressing the **SLEEP** button increases the playing time in steps of 10 minutes up to 60 minutes.
- Longer pressing the SLEEP button automatically increases the playing time in steps of 10 minutes.

– The display shows **SLEEP** and the time display shows the entered playing time.

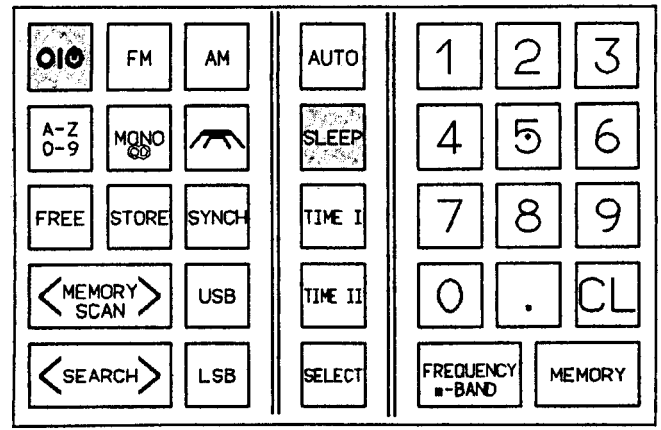
– When the programmed sleep time has elapsed, the radio switches off automatically and the indication **SLEEP** disappears.

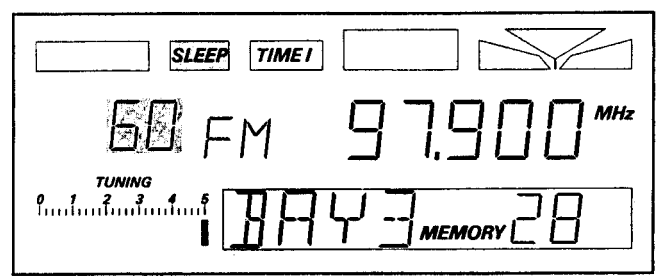
Checking the playing (sleep) time

- **Briefly** press button SLEEP.
  The time display shows the time remaining until switching off.

Premature erasing of the playing time

- Switch unit off with button O/⏻.



## Clock Operation

- The maximum 12 seconds intervall between each programming step also applies for the clock.
- Times can be programmed with the unit switched on or switched off.
- Times of day and switching on times must be entered with **four digits** and with **decimal point**.

**Setting the Clock** (TIME I/Time of Day I) with the help of a reference clock.

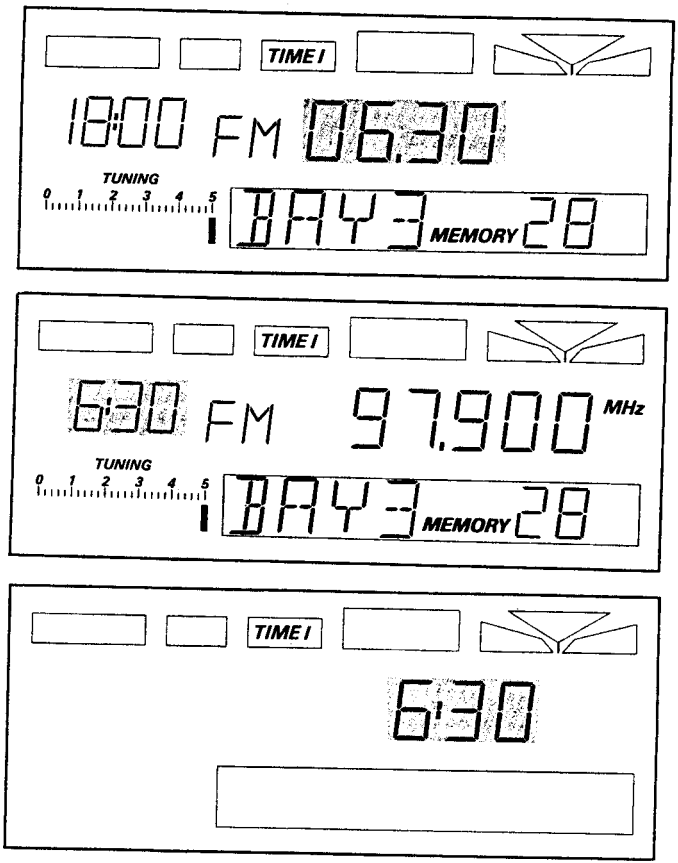
Example: 6.30 hours:

- Subsequently enter 0 6 . 3 0 with the numeric buttons.
- **Press and hold down button TIME I** until the reference clock changes from 6.29.59 to 6.30.00.
  When the set is switched on, the time will be transferred to the display.
  When releasing button **TIME I**, the clock starts running exactly from the minute (0 seconds).

For programming TIME II/Time of day II, proceed in the same way, but press button **TIME II** instead of TIME I.
As the seconds of time II are running synchronously with the seconds of time I, you need not to wait until the minutes change in this case.

**Indication of the Time of Day** (TIME I/II)

- Press button TIME I or TIME II without having entered the time.
  The display will show the respective time.
  When the set is switched off, the time will be indicated in the main display (large indication).
  During radio operation, the time is indicated in the time display (small indication).



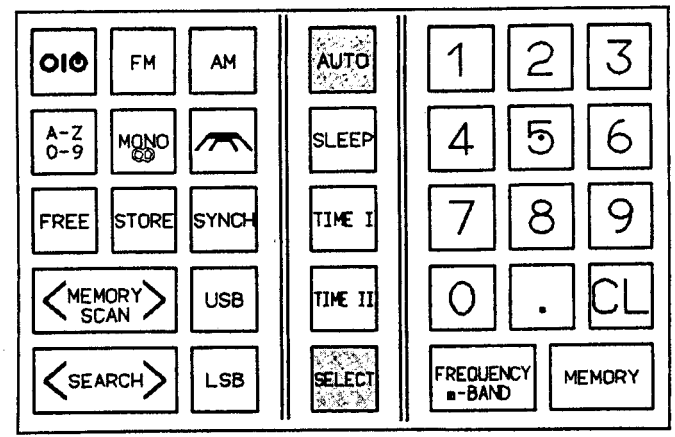
## *Automatic Functions*

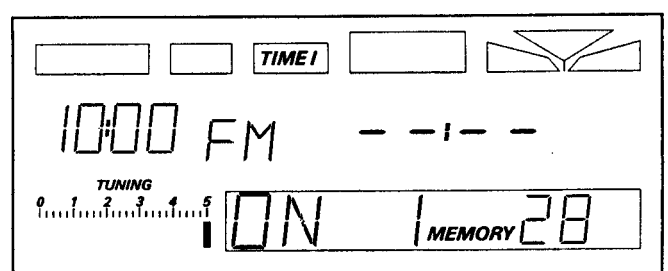
With your Satellit 500, it is possible to programme **two independent switch-on and switch-off times.**
Each switch-on time can be allocated to a different station.
You can, for example, let automatically switch on your favorite station with **switch-on time 1.**
If there is another programme of the same station or on another waveband (eg: latest news) that you wish to listen to before the switch-on time 1 is reached, select this programme with **switch-on time 2** and **switch-off time 2.**
You then will hear this programme in the selected time interval as soon as **switch-on time 2** is reached.
After that, the unit will be switched on again when **switch-on time 1** is reached.
Already programmed stations are not affected by the time programming.

The switching times refer to the times (TIME I or TIME II) shown in the display.

Example:
You have programmed the **local time** (eg: MEZ or MESZ) as TIME I.
As TIME II you have programmed a **second timezone** (eg: Universal Time/UTC).

As switch-on time you have programmed 14.00 hours and you have switched the radio to "AUTO".
If the display shows **TIME I**, the set will be switched on at 14.00 hours **local time.**
If the display shows **TIME II**, the set will be switched on at 14.00 hours of the **second timezone.**



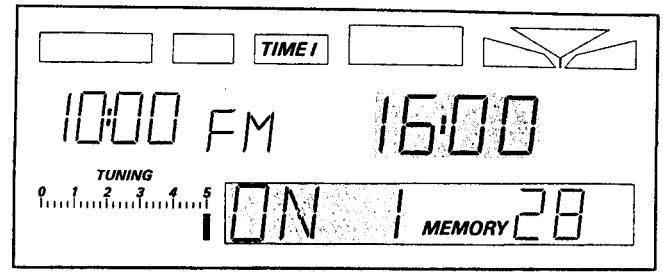
**Programming the Switching Times**

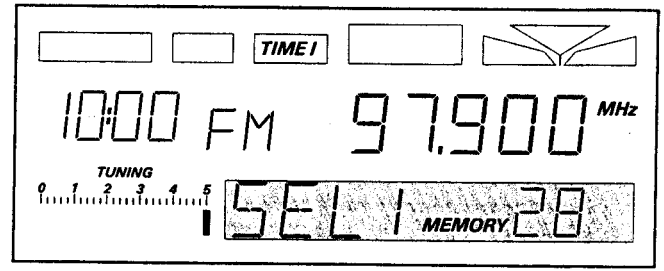
**Switching Time 1**

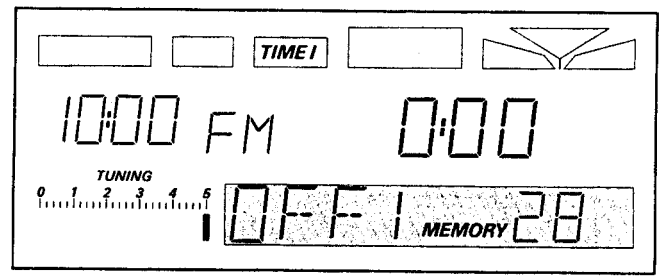
- Switch on the set
- Press preselection button **SELECT**.
  *The main display shows* **– – : – –** *and* **ON 1** (switch-on time 1) when the memory is free, or a random time if a switch-on time has already been programmed.
  In the second case, the already programmed time is simply "overwritten".

Example: Programming a switch-on time 1 of 16.00 hours.

- Subsequently enter the figures 1 6 . 0 0 with the numeric buttons.
- Press preselect button **SELECT**.
  **SEL 1** will appear in the main display.
- Select a programmed station (eg: 28-MEMORY) with the **numeric buttons**, button **MEMORY** or **MEMORY SCAN**, and set the desired sound volume.
  The station number and **MEMORY** will appear in the main display.
- Press preselect button **SELECT**.
  **0:00** and **OFF 1** (switch-off time 1) will appear in the main display.
  This already programmed switch-off time is provided to prevent that the set remains on longer than 24 hours.
  Of course it is possible to programme any desired switch-off time 1, but this must differ from the switch-on time 1.



Finally

- press preselect button **SELECT** to switch back to normal operation.
- Press button **AUTO**. **AUTOMATIC** will appear in the display, the radio is switched off and the switch-on time 1 is transferred to the time display (small indication).

Of course it is possible to switch the radio off and on again with the on/off button **O/⏻** to listen to the radio independently of the switching times.

**Switching Time 2**

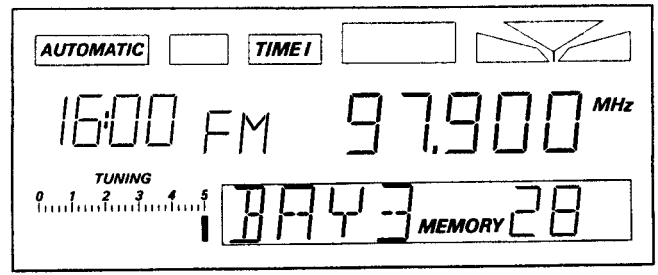
- Switch on the set.
- Press numeric button "**2**" and then button **SELECT**. Further steps as with switching time 1.
  Each time button **SELECT** is pressed, **ON 2 – SEL 2 – OFF 2** will appear in the display.
- To terminate programming, press button **SELECT** to switch back to normal operation and then button **AUTO** to activate the switching times.

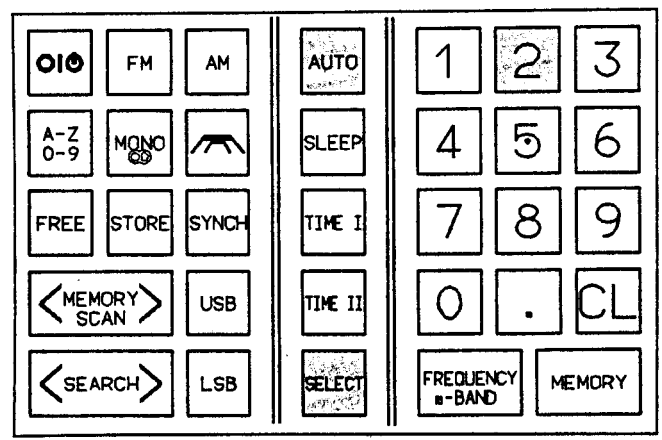
If two switching times are programmed, the display will show the first switch-on time which will be reached.
When this time has been elapsed, the display will switch to the next following switch-on time.

**Checking the Switching Times**

**Switching Time 1**
**Repeatedly pressing button SELECT** indicates one after the other the switch-on time, the station, and the switch-off time.

**Switching Time 2**
First press the numeric button "**2**", then repeatedly press button **SELECT**.




**Please observe that the SELECT button must be pressed after termination of the check to switch back to normal operation.**

**Erasing of Switch-On Times**

This function can be used, for example, if you wish to "lock" one of the two switch-on times.
To do this, simply enter **no switch-on time** (after selection with **SELECT** or **2-SELECT**).

*Entries of* ***switch-on time 1*** *or* ***switch-on time 2*** which are no longer desired or wrong entries can be erased with the button **CL** (Clear).
The main display will show – – : – – and a new entry is expected.
Press button **SELECT** again to switch back to normal operation. The selected station number and the switch-off time remain programmed.

**Automatic Switching On and Off**

- Button **AUTO** permits to switch on and off the automatic functions.
- So that the switching functions are performed, AUTOMATIC must appear in the display.
- The switching times must be programmed.
- The set must be tuned to the desired station and set to the required volume level.
  Then

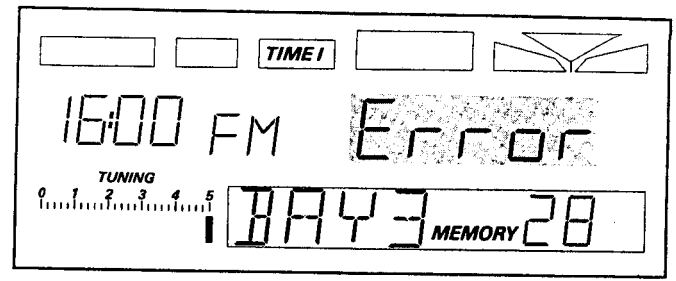
• press button **AUTO**.
The display will show **AUTOMATIC** and **TIME I** or **TIME II**. The time of day will appear in the main display and the switch-on time in the time display (small indication).

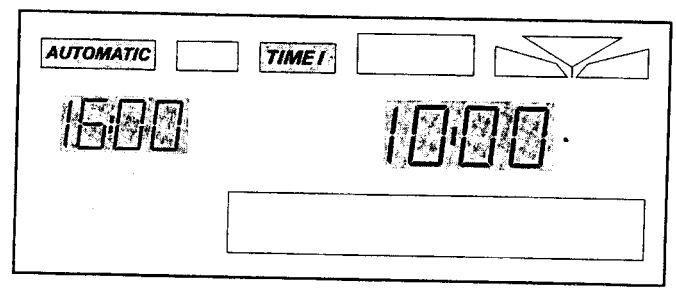
- If no switching-on times are entered, the error message **Error** will appear when pressing the **AUTO** button.

At the programmed times, the set is automatically switched on and off.

**Clearing the Switching Times**

To do this, press button **AUTO** until the AUTOMATIC indication disappears from the display.



**TIMER Recordings**

If you have a cassette recorder with **start/stop remote control facility**, it is also possible to record radio programmes during the programmed times.

To do this:

- Connect the output switch socket ⊿ ⑤ with the switch socket of the cassette recorder.

  For technical details see note and drawing at the right.

**Automatic Control of a Cassette Recorder**

With your Satellit 500 it is possible to automatically start and stop timer recordings with cassette recorders provided with positiv or negativ logic control facility.

For this, you need a special connecting cable. Please consult your dealer.

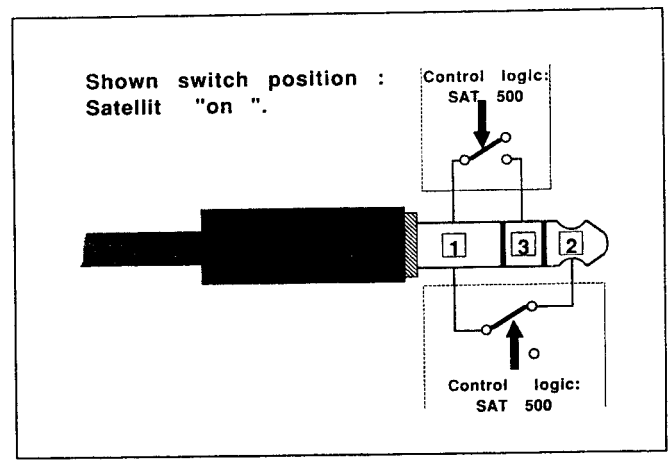
For **mono recordings**, connect the LINE OUT socket of the Satellite with the LINE IN socket of the cassette recorder.

For **stereo recordings**, connect the LINE inputs of the recorder with a commercially available adapter cable (Y-cable) with the earphone socket ③ of the Satellite. Observe in this case, that the volume and tone settings are not changed during recording.

- Switch the cassete recorder to recording/start.
  When the Satellite is automatically switched on, the cassette recorder is started too and records the programme of the station tuned to.

**Note for the specialized dealer**

On AUTOMATIC operation, the switching voltage supplied by the cassette recorder (max. voltage: 16V, max. current: 60mA) is handled as follows:



## Single Side Band (SSB) Reception

is an additional function to normal radio reception.

- Switch on your set and tune to a SW amateur band (SSB stations are mainly transmitted on these bands).
- Reduce the bass tones with the bass control ♪:
- With the tuning knob ❮TUNING❯ ⑮ slowly scan the band step by step for SSB stations.

Please consider that the carrier is suppressed on SSB transmissions.
For this reason, reception is only possible when the transmitter is actually operating (mostly emitting speech). During pauses, tuning is not possible.
The TUNING indicator [14] is of great help when searching an SSB station.
You will notice, that the TUNING indication deflects in the rythm of the speech (modulation).

- As soon as you have found a station (the speech will still be unintelligible), switch to **SSB** reception using button **LSB** (in the case of frequencies below 10 MHz) or button **USB** (in the case of frequencies above 10 MHz).
- Turn knob ❮TUNING❯ ⑮ slowly forth and back to find the point of best intelligibility.
  If this should not be possible, select the other side band.
- Turn control **AGC** ◢ **MGC** ⑯ from its home position **AGC** to **MGC** (the station is muted) and continue turning the AGC/MGC control until the station can be heard again.
  The best adjustment is reached when the tuning indication [14] deflects in the centre part of its range during speech transmissions.
  Use both the MGC control and the volume control for this adjustment.
- In the case of strong stations, when receiving in the evening or when interferences should occur, set the local/distant switch **SENS DX/LOC** ⑲ to **LOC**.

Even more as for normal SW reception, SSB reception may be impaired by the following factors:

- Location of reception (shading through buildings)
- Reception conditions (atmosphere)
- Aerial (ideal is a special SW aerial)

**If you wish to terminate the reception of SSB stations, do not forget to switch back to normal AM radio reception in the following way:**

- Press button **LSB** or **USB** once again and set control **AGC** ◢ **MGC** ⑯ to **AGC** (home position).

## Maintenance

Only a soft cloth which picks up dust should be used to clean the cabinet. Do not use aggressive polishes or cleaning agents as these may damage the surface in the cabinet.
In the case of a defect, please consult your specialized dealer.

## Prescreptions and Regulations

This set complies with the safety regulations according to VDE 0860 and thus with the international safety regulations according to IEC 65 and CEE 1.

## Accessories

Information on accessories available for your Satellit can be found in the "GRUNDIG Revue" which you can obtain from your dealer.

# *Specification*

**Power supply requirement**
- From batteries: 4 x 1.5 V "HP 2" (IEC LR20) batteries or accumulators IEC K35/62.
  Built-in rechargable lithium battery for data protection.
- From external DC supply: Mains unit NR 90 or 9–12 V DC.

**Output power** (MONO and STEREO) on 7.5 Ω.
- Mains/music power according to DIN 45324: 1 or 2 x 1.5 W, resp.
- Peak power: 1 or 2 x 3 W, respectively.

**Built-in aerials**
- telescopic aerial for FM and SW, ferrite rod aerial for MW and LW.

**Connecting sockets for**
- driving amplifier installations and for mono tape recordings; LINE OUT (Cinch socket)
- headphone with 3.5 mm Jack plug, 32-2000 ohms, and for stereo tape recordings
- external loudspeaker (left-hand channel) with 3.5 mm Jack plug, 8 ohm
- driving external units, eg: tape recorders (output switch socket)
- for external power supply: mains unit NR 90 or 9 – 12V DC (5.5 mm coaxial socket)
- external aerial DIN 45325 (75 ohm coaxial socket for all wavebands)

**Wavebands**

FM: 87.5 – 108 MHz
SW: 1612 – 26100 kHz (Satellit 500 professional)
1612 – 30000 kHz (Satellit 500 international)
3900 – 26100 kHz (Satellit 500 Italia)
MW: 513 – 1611 kHz
LW: 148 – 353 kHz
LW: 148 – 302 kHz (Satellit 500 Italia)

**Receivable SW Bands**

| Band | Frequency (kHz) | |
|---|---|---|
| 160-m-amateur | 1815 – 1890 | (not on Satellit 500 Italia) |
| 120-m-radio | 2300 – 2498 | (not on Satellit 500 Italia) |
| 90-m-tropic | 3200 – 3400 | (not on Satellit 500 Italia) |
| 80-m-amateur | 3500 – 3800 | (not on Satellit 500 Italia) |
| 75-m-radio | 3900 – 4000 | |
| 60-m-tropic | 4750 – 5060 | |
| 49-m-radio | 5950 – 6200 | |
| 41-m-radio | 7100 – 7300 | |
| 40-m-amateur | 7000 – 7100 | |
| 31-m-radio | 9500 – 9900 | |
| 30-m-amateur | 10100 – 10150 | |
| 25-m-radio | 11650 – 12050 | |
| 22-m-radio | 13600 – 13800 | |
| 20-m-amateur | 14000 – 14350 | |
| 19-m-radio | 15100 – 15600 | |
| 17-m-amateur | 18068 – 18168 | |
| 16-m-radio | 17550 – 17900 | |
| 15-m-amateur | 21000 – 21450 | |
| 13-m-radio | 21450 – 21850 | |
| 12-m-amateur | 24890 – 24990 | |
| 11-m-radio | 25670 – 26100 | |
| 10-m-amateur | 28000 – 29700 | (Satellit 500 international) |

**IF:** FM = 10.7 MHz, AM IF 1 = 54.5 MHz, IF 2 = 450 kHz.

Subject to technical alterations and alterations in styling.
E. and O.E.

## Die Deutsche Bundespost informiert

Sehr geehrter Rundfunkteilnehmer!

Dieses Gerät ist von der Deutschen Bundespost als Ton- bzw. Fernseh-Rund*funkempfänger oder als Komponente einer* solchen Anlage (Tuner, Verstärker, aktive Lautsprecherbox, Video-Monitor) zugelassen. Das Gerät entspricht den zur Zeit geltenden Technischen Vorschriften der Deutschen Bundespost und ist zum Nachweis dafür mit dem entsprechenden Zulassungszeichen gekennzeichnet.

Bitte überzeugen Sie sich selbst.
Dieses Gerät darf im Rahmen der umseitig abgedruckten »Allgemeinen Genehmigung für Ton- und Fernseh-Rundfunkempfänger« in der Bundesrepublik Deutschland betrieben werden. Beachten Sie aber bitte, daß aufgrund dieser Allgemeinen Genehmigung nur Sendungen des Rundfunks empfangen werden dürfen*). Wer unbefugt andere Sendungen (z. B. des Polizeifunks, des Seefunks, der öffentlichen beweglichen Landfunkdienste) empfängt, verstößt gegen die Genehmigungsauflagen und macht sich daher nach Paragraph 15 Absatz 2a des Gesetzes über Fernmeldeanlagen strafbar.

Die Kennzeichnung mit dem Zulassungszeichen bietet Ihnen die Gewähr, daß dieses Gerät keine anderen Fernmeldeanlagen, einschließlich Funkanlagen, stört. Die Zusatzbuchstaben **S**, **SE** oder **SK** beim Zulassungszeichen besagen außerdem, daß das Gerät gegen störende Beeinflussungen durch andere Funkanlagen (z. B. des Amateurfunks, des CB-Funks) weitgehend unempfindlich ist**). Sollten ausnahmsweise trotzdem Störungen auftreten, so wenden Sie sich bitte an die örtlich zuständige Funkstörungsmeßstelle.

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*) Zum Empfang anderer Sendungen darf dieses Gerät nur mit Genehmigung der Deutschen Bundespost benutzt werden. Allgemein genehmigt ist nur der Empfang der Aussendungen von Amateurfunkstellen und der Normalfrequenz- und Zeitzeichensendungen.

**) Weitere Buchstaben und/oder Buchstabenkombinationen (z. B. E, K, VT, VBT, usw.) betreffen die technische Ausstattung des Gerätes und haben in Bezug auf die Störfestigkeit keine Bedeutung.

### Allgemeine Genehmigung für Ton- und Fernseh-Rundfunkempfänger

Die Allgemeine Ton- und Fernseh-Rundfunkgenehmigung vom 11. Dezember 1970 (veröffentlicht im Bundesanzeiger Nr. 234 vom 16. Dezember 1970) wird unter Bezug auf Abschnitt III der Genehmigung durch folgende Fassung der Allgemeinen Genehmigung für Ton- und Fernseh-Rundfunkempfänger gemäß den §§ 1 und 2 des Gesetzes über Fernmeldeanlagen ersetzt.

**Genehmigung für Ton- und Fernseh-Rundfunkempfänger**

I.

1. Die Errichtung und der Betrieb von Ton- und Fernseh-Rundfunkempfängern werden nach §§ 1 und 2 des Gesetzes über Fernmeldeanlagen in der Fassung der Bekanntmachung vom 17. 3. 77 (BGBl. I S. 459) allgemein genehmigt.

2. Ton- und Fernseh-Rundfunkempfänger im Sinne dieser Genehmigung sind Funkanlagen gemäß § 1 Abs. 1 des Gesetzes über Fernmeldeanlagen, die ausschließlich die für Rundfunkempfänger zugelassenen Frequenzabstimmbereiche*) aufweisen und zum Aufnehmen und gleichzeitigen Hör- oder Sichtbarmachen von Ton- oder Fernseh-Rundfunksendungen bestimmt sind. Zum Empfänger gehören auch eingehaute oder mit ihm fest verbundene Antennen sowie bei Unterteilung in mehrere Geräte die funktionsmäßig zugehörenden Geräte.

   Außer für den Empfang von Rundfunksendungen dürfen Ton- und Fernseh-Rundfunkempfänger nur mit besonderer Genehmigung der Deutschen Bundespost für andere Fernmeldezwecke zusätzlich benutzt werden.

   In den Empfänger eingebaute oder sonst mit ihm verbundene Zusatzgeräte (z. B. Ultraschallfernmeldeanlagen, Infrarotfernmeldeanlagen) werden von dieser Genehmigung nicht erfaßt (ausgenommen die Einrichtungen zum Empfang des Verkehrsrundfunks). Desgleichen sind andere technische Empfängereigenschaften, die über den eigentlichen Zweck eines Rundfunkempfängers hinausgehen (z. B. zum Empfang anderer Funkdienste, für die Wiedergabe im Rahmen von Textübertragungsverfahren), hierdurch nicht genehmigt. Hierfür gelten besondere Regelungen.

II.

Diese Genehmigung wird unter nachstehenden Auflagen erteilt:

1. Ton- und Fernseh-Rundfunkempfänger müssen den jeweils geltenden Technischen Vorschriften für Ton- und Fernseh-Rundfunkempfänger entsprechen. Eingebaute Zusatzgeräte müssen den für sie geltenden Bestimmungen und technischen Vorschriften genügen.

   Änderungen der Technischen Vorschriften, die im Amtsblatt des Bundesministers für das Post- und Fernmeldewesen veröffentlicht werden, muß bei schon errichteten und in Betrieb genommenen Ton- und Fernseh-Rundfunkempfängern nachgekommen werden, wenn durch den Betrieb dieser Rundfunkempfänger andere elektrische Anlagen gestört werden.

   Serienmäßig hergestellte Ton- und Fernseh-Rundfunkempfänger müssen zum Nachweis dafür, daß sie den Technischen Vorschriften entsprechen, mit einer FTZ-Prüfnummer gekennzeichnet sein**). Die FTZ-Prüfnummer sagt über die elektrische und mechanische Sicherheit und die Einhaltung der Strahlenschutzbestimmungen nichts aus.

2. Ton- und Fernseh-Rundfunkempfänger dürfen an ortsfesten oder nichtortsfesten Rundfunk-Empfangsantennenanlagen, -Verteilanlagen oder Kabelfernsehanlagen betrieben und im Rahmen der Bestimmungen über private Drahtfernmeldeanlagen mit Drahtfernmeldeanlagen verbunden werden.

   Auf dem selben Grundstück oder innerhalb eines Fahrzeuges dürfen Ton- und Fernseh-Rundfunkempfänger mit anderen Geräten oder sonstigen Gegenständen (z. B. Plattenspieler, Magnetaufzeichnungs- und -Wiedergabegeräten, Antennen) verbunden werden, sofern diese Geräte von der Deutschen Bundespost genehmigt sind oder keiner Genehmigung bedürfen.

   Die räumliche Kombination von Funkanlagen mit Ton- oder Fernseh-Rundfunkempfängern ist nur dann zulässig, wenn die betreffenden Funkanlagen je für sich genehmigt sind.

3. Mit Ton- oder Fernseh-Rundfunkempfängern dürfen aufgrund dieser Genehmigung nur Sendungen des Rundfunks empfangen werden, also übertragene Tonsignale (Musik, Sprache) und Fernsehsignale (nur Bildinformationen). Andere Sendungen (z. B. des Polizeifunks, der öffentlichen beweglichen Landfunkdienste, Datenübertragungen) dürfen nicht aufgenommen werden; werden sie jedoch unbeabsichtigt empfangen, so dürfen sie weder aufgezeichnet, noch anderen mitgeteilt, noch für irgendwelche Zwecke ausgewertet werden. Das Vorhandensein solcher Sendungen darf auch nicht anderen zur Kenntnis gebracht werden.

4. Durch Ton- oder Fernseh-Rundfunkempfänger darf der Betrieb anderer elektrischer Anlagen nicht gestört werden.

5. Änderungen der Ton- oder Fernseh-Rundfunkempfänger, die die zulässigen Frequenzabstimmbereiche der Empfänger erweitern, gehen über den Umfang dieser Genehmigung hinaus und bedürfen vor ihrer Ausführung einer besonderen Genehmigung der Deutschen Bundespost.

   Wer aufgrund dieser Genehmigung einen Ton- oder Fernseh-Rundfunkempfänger betreibt, hat bei einer Änderung der kennzeichnenden Merkmale von Ton- oder Fernseh-Rundfunksendern (insbesondere bei Änderung des Sendeverfahrens oder bei Frequenzwechsel) die ggf. notwendig werdenden Änderungen an dem Rundfunkempfänger auf seine Kosten vornehmen zu lassen.

6. Die Deutsche Bundespost ist berechtigt, Rundfunkempfänger und mit ihnen verbundene Geräte darauf zu prüfen, ob die Auflagen der Genehmigung und die Technischen Vorschriften eingehalten werden.

   Den Beauftragten der Deutschen Bundespost ist das Betreten der Grundstücke oder Räume, in denen sich Ton- oder Fernseh-Rundfunkempfänger befinden, zu den verkehrsüblichen Zeiten zu gestatten. Befinden sich die Rundfunkempfänger oder mit ihnen verbundene Geräte nicht im Verfügungsbereich desjenigen, der die Empfänger betreibt, so hat er den Beauftragten der Deutschen Bundespost Zutritt zu diesen Teilen zu ermöglichen.

III.

Bei Funkstörungen, die nicht durch Mängel der Rundfunkempfänger oder der mit ihnen verbundenen Geräte verursacht werden, können die Funkmeßdienste der Deutschen Bundespost zur Feststellung der Störung in Anspruch genommen werden.

IV.

1. Diese Genehmigung kann allgemein oder durch die örtlich zuständige Oberpostdirektion einem einzelnen Betreiber gegenüber für einen bestimmten Rundfunkempfänger widerrufen werden. Ein Widerruf ist insbesondere zulässig, wenn die unter Abschnitt II aufgeführten Auflagen nicht erfüllt werden.

   Anstatt die Genehmigung zu widerrufen, kann die Deutsche Bundespost anordnen, daß bei einem Verstoß gegen eine Auflage ein Ton- oder Fernseh-Rundfunkempfänger außer Betrieb zu setzen ist und erst bei Einhaltung der Auflagen wieder betrieben werden darf.

   Die Auflagen dieser Genehmigung können jederzeit ergänzt oder geändert werden.

2. Diese Genehmigung ersetzt die Allgemeine Ton- und Fernseh-Rundfunkgenehmigung vom 11. Dezember 1970, sie gilt ab 1. Juli 1979.

Bonn, den 14. 5. 1979

Der Bundesminister für
das Post- und Fernmeldewesen
Im Auftrag
Haist

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*) Siehe Technische Vorschriften für Ton- und Fernseh-Rundfunkempfänger, veröffentlicht im Amtsblatt des Bundesministers für das Post- und Fernmeldewesen.

**) Für ausnahmsweise noch nicht gekennzeichnete, vor dem 1. Juli 1979 errichtete und in Betrieb genommene Ton-Rundfunkempfänger wird die Kennzeichnung nicht verlangt.